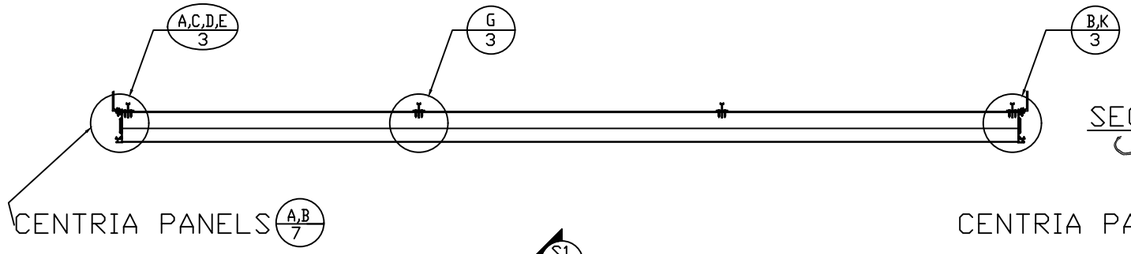
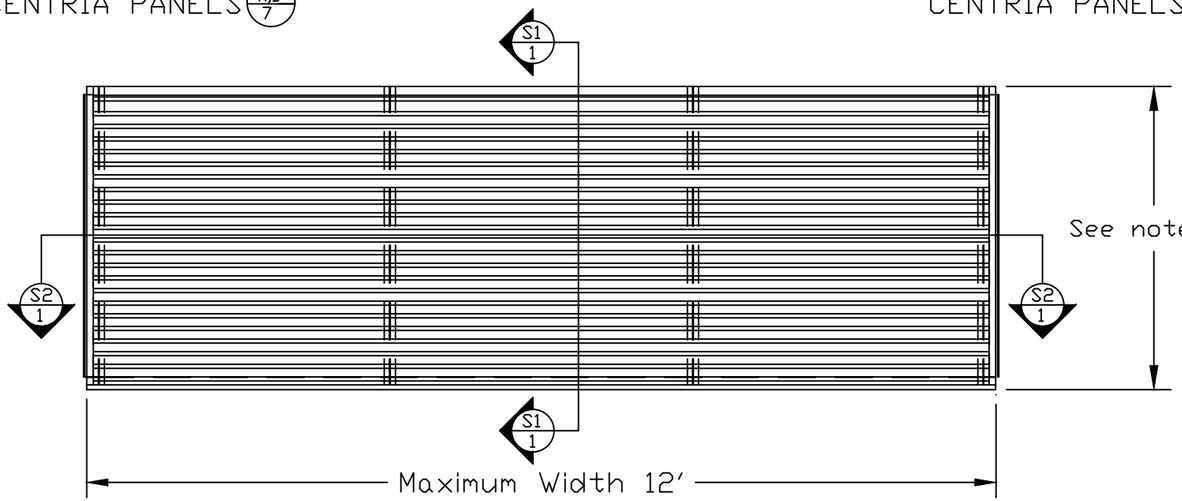


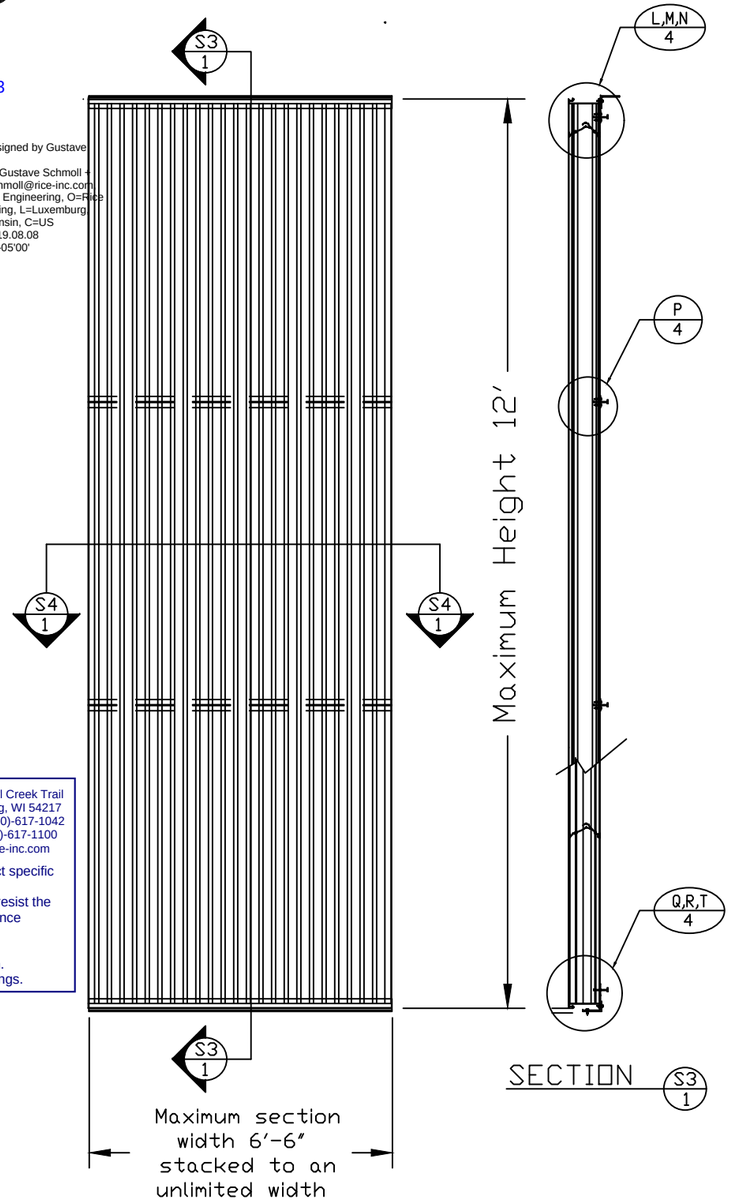
SECTION S2/1

SECTION S4/1

SECTION S1/1



SPECIMIN 1-DCH-5704
130 PSF



SECTION S3/1

SPECIMIN 2-DCV-5704
130 PSF

1) It shall be the responsibilityof the Structural Engineer of Record to verify the capacity of the structure to support the loads imposed by the louvers.
2) These louvers have been designed and tested in accordance with Dade County protocals TAS 201, TAS 202 and TAS 203.
3) All fasteners shall be stainless steel or plated steel.
4) All concrete substrate shall be a minimum of 2000 psi .
5) Maximum single panel size: 144"w x 78"h (DCH-5704) or 78"w x 144" h (DCV-5704). For the DCH-5704, multiple panels may be stacked to an unlimited height if each end of the 144" panel is secured to structure. If the DCH-5704 is joined together with vertical joint (refer to sheet 8 of 8), then the number of panels that may be stacked is limited to the design of the mullions shown on sheet 8 of 8. For the DCV-5704, multiple panels may be placed side by side for an unlimited width.
6) The louver is to be installed in a location where the room behind the louver is designed to drain water penetrating into the room and the room will house waterproof or water resistant equipment, components or supplies.
7) Jamb clip spacing may not be altered. Each clip and fastener used must be detailed on the drawing and verified in the tables on sheet 6 of 8.
8) Separation of unpainted aluminum and dissimilar materials to be maintained by the installer
9) The design of the louvers is according to the following codes and standards;
   The 2006 International Building Code as modified and adopted by the State of Texas
   ADM - Aluminum Association Design Manual
10) This louver system has been tested, analyzed and approved for design pressures not to exceed 150 PSF.
11) See sheet 2 of 8 for louver size vs windload table
12) These louvers may be used with the blades in a horizontal orientation under model name DCH-5704 or with blades in a vertical orientation under model name DCV-5704.
13) At the sill, the jamb is square cut and butted onto the sill and held with two #10 X 1-1/2" SS pan head screws.
14) The head extrusion is square cut and butted into the jamb and held with two #10 X 1-1/2" inch SS pan head screws.
15) For blades in a horizontal orientation, the blades are attached to vertical jambs with two #10 X 1-1/2" inch SS pan head screws at each blade end.
16) For blades in a vertical orientation, the blades are attached to the head and sill with two #10 X 1-1/2" inch SS pan head screws at each blade end.
17) Blades are attached to shaped louvers with two 5/8" x 1/8" fillet welds at each blade end, see detail W/5.
18)The louver assembly satisfies the Texas Department of Insurance's criteria for protection from windborne debris in both Inland I Zone and the Seaward Zone. The assembly has passed a missile test equivalent to missile level D and missile level E specified in ASTM E 1996. The assembly may be installed at any height on the structure provided the design pressure rating for the assembly is not exceeded.

STATE OF TEXAS
GUSTAVE L. SCHMOLL
124202
LICENSED
PROFESSIONAL ENGINEER
08/08/2019
Firm Number: F-2183

Digitally signed by Gustave Schmoll
DN: CN=Gustave Schmoll, E=gusschmoll@rice-inc.com, OU=Rice Engineering, O=Rice Engineering, L=Luxemburg, S=Wisconsin, C=US
Date: 2019.08.08 13:37:28-05'00'

Gustave Schmoll

RICE ENGINEERING
105 School Creek Trail
Luxemburg, WI 54217
Phone: (920)-617-1042
Fax: (920)-617-1100
www.rice-inc.com

These drawings are not intended to be submitted as project specific structural drawings, however, these drawings provide an acceptable engineered design for the DC-5704 louvers to resist the specified loading, as well as to meet Texas Dept. of Insurance requirements. It does NOT include responsibility for:
* Design of air and water infiltration prevention
* The manufacture, assembly, or installation of the system.
* Quantities of materials or dimensional accuracy of drawings.

PROJECT: DC-5704 FOR TEXAS DEPT OF INSURANCE
TITLE: LAYOUT DRAWINGS
SCALE: 1/2" = 1'-0"
DRW BY: R. GEIST
REVISION: 07-02-19
DATE: 10-02-08
SHEET: 1 OF 8
DRW NO : RD-1075

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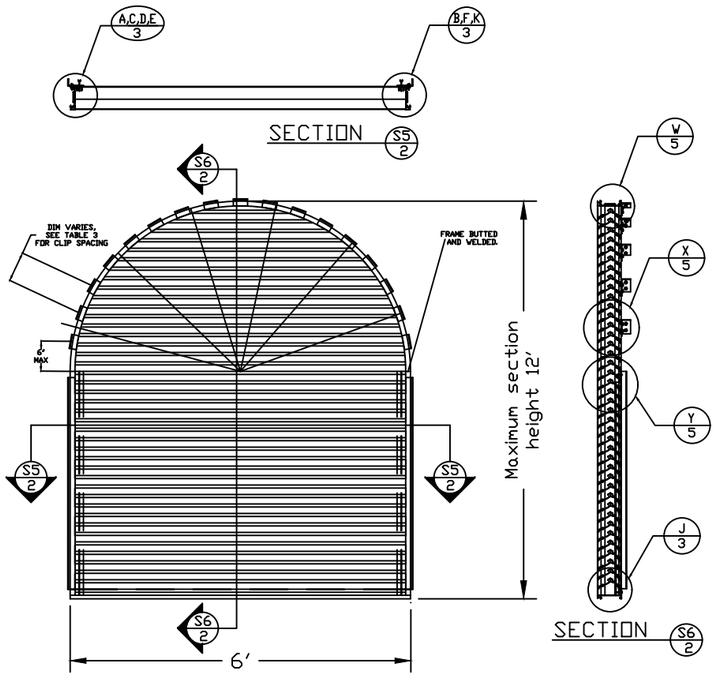
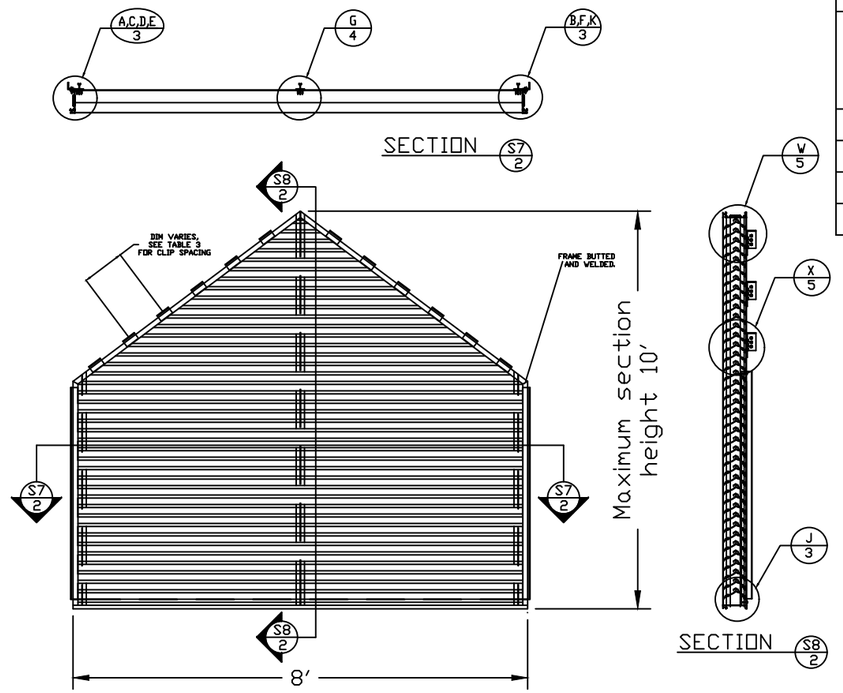
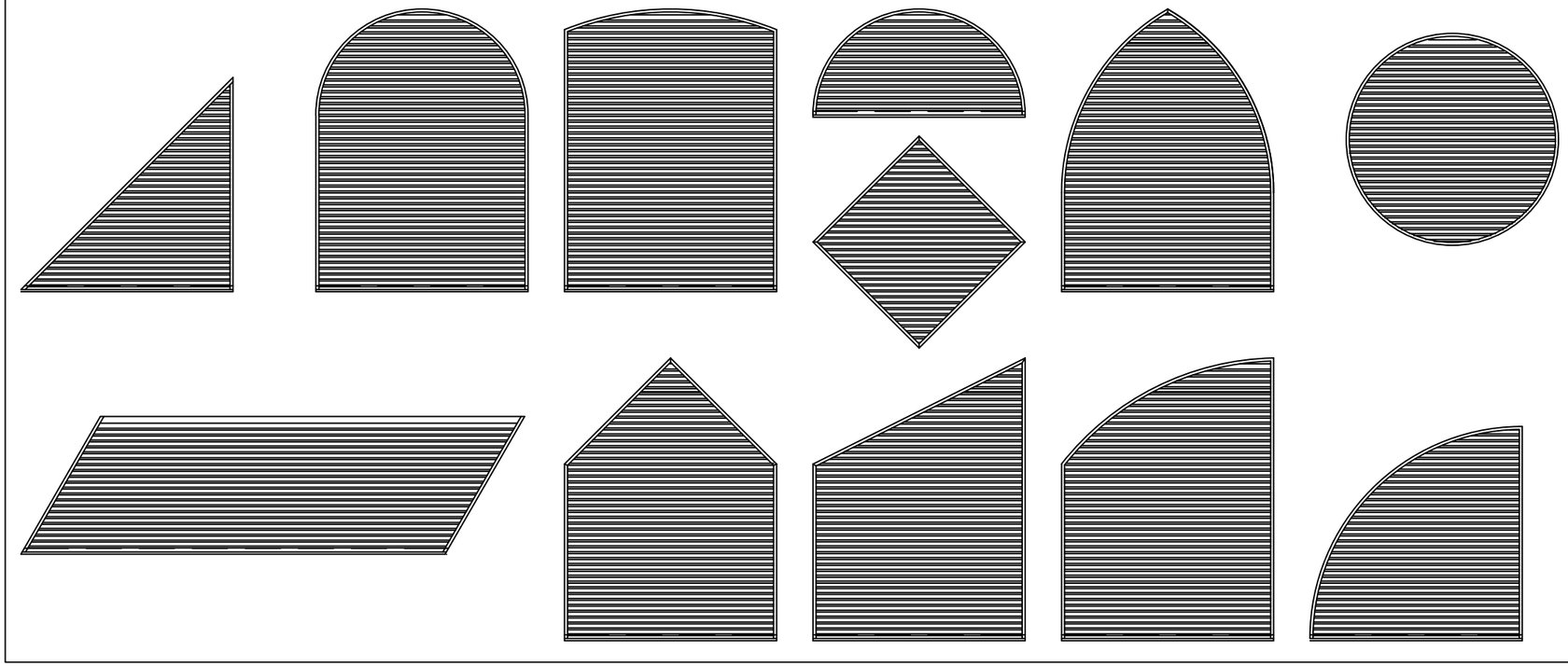


SPECIMIN 3
150 PSF



SPECIMIN 4
150 PSF

Louver Size versus Windload Table			
Louver dimension (parallel to blade length)	Maximum Windload	Ref. Specimen	Number of Intermediate Blade Stiffeners
(feet & inches)	PSF		
6'-0" or less	150	Specimen 3	0
6'-0 1/16" to 8'-0"	150	Specimen 4	1
8'-0 1/16" to 12'-0"	130	Specimen 1 & 2	2



STATE OF TEXAS
GUSTAVE L. SCHMOLL
124202
LICENSED PROFESSIONAL ENGINEER

08/08/2019
Firm Number: F-2183

PROJECT: DC-5704 FOR TEXAS DEPT OF INSURANCE
TITLE: LAYOUT DRAWINGS
SCALE: 3/8" = 1'-0"
DRW BY: R. GEIST
REVISION: 07-02-19
DATE: 10-02-08
SHEET: 2 OF 8
DRW NO : RD-1075

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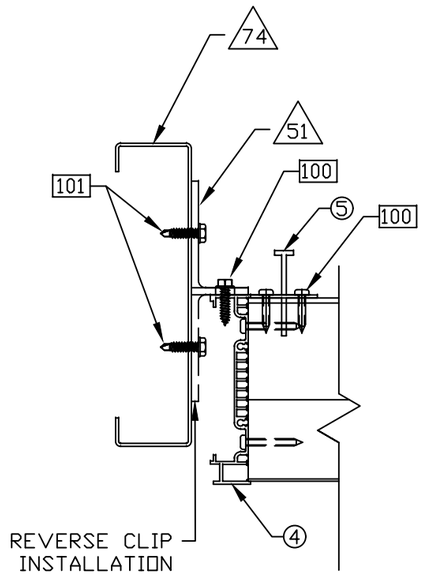
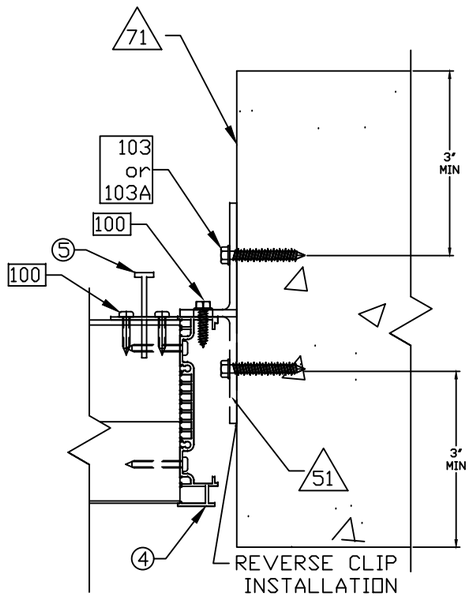


16 Ga MIN GALVANIZED STRUCTURAL STEEL STUD

Detail A / 3

SCALE: NTS

SP-1,3 & 4

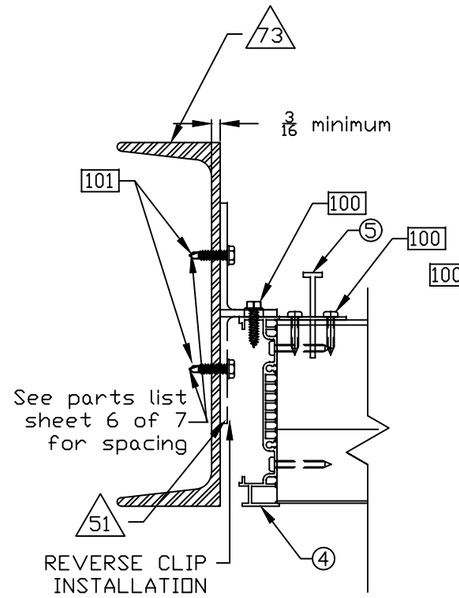


2000 LB MIN CONCRETE

Detail B / 3

SCALE: NTS

SP-1,3 & 4

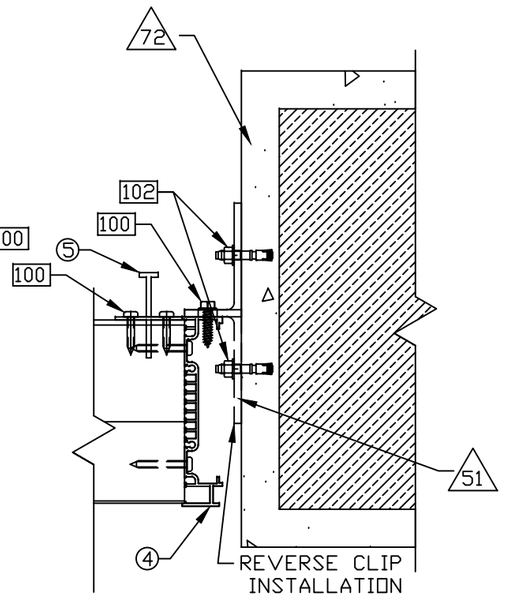


3/16" MINIMUM STRUCTURAL STEEL

Detail C / 3

SCALE: NTS

SP-1,3 & 4

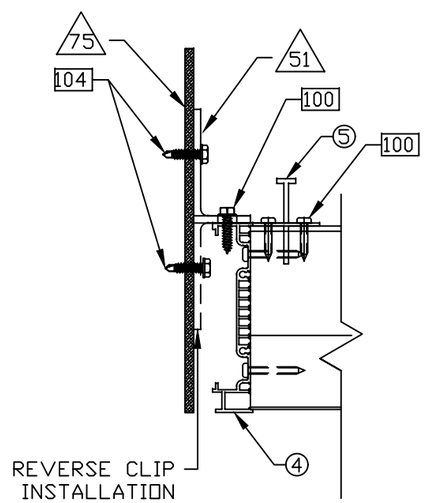


CONCRETE FILLED CMU

Detail D / 3

SCALE: NTS

SP-1,3 & 4



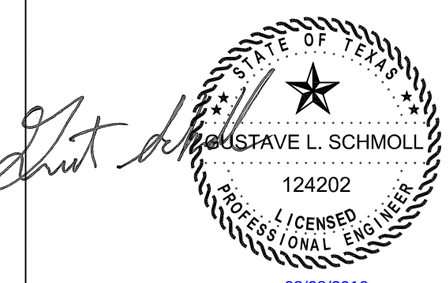
1/8" MINIMUM ALUMINUM PLATE

Detail E / 3

SCALE: NTS

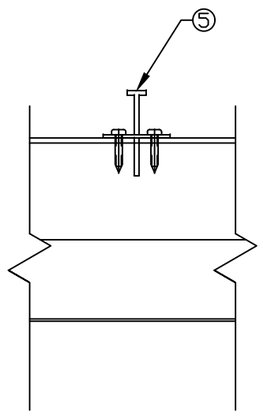
SP-1,3 & 4

THESE DETAILS PERTAIN TO THE HORIZONTAL BLADE ORIENTATION, DCH-5704



08/08/2019

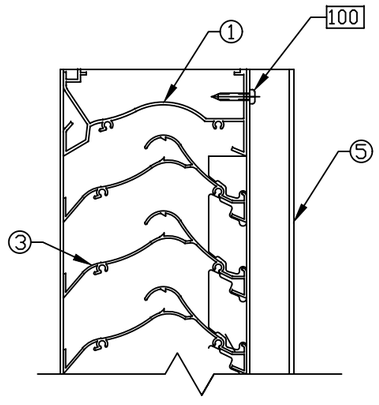
Firm Number: F-2183



Detail G / 3

SCALE: NTS

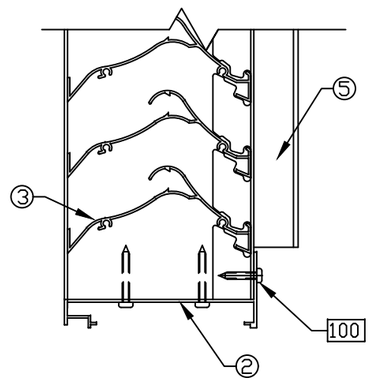
SP-1 & 4



Detail H / 3

SCALE: NTS

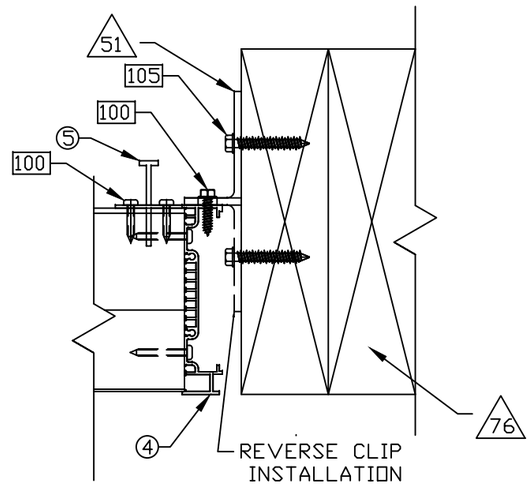
SP-1



Detail J / 3

SCALE: NTS

SP-1,3 &4



WOOD
G=0.42 MIN.

Detail K / 3

SCALE: NTS

SP-1,3 &4

PROJECT: DC-5704 FOR TEXAS DEPT OF INSURANCE

TITLE: LAYOUT DRAWINGS

SCALE: 3"=1'-0"

DRW BY: R. GEIST

REVISION: 07-02-19

DATE: 10-02-08

SHEET: 3 OF 8

DRW NO : RD-1075

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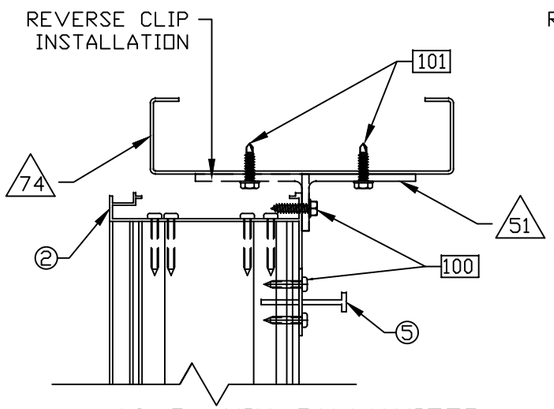
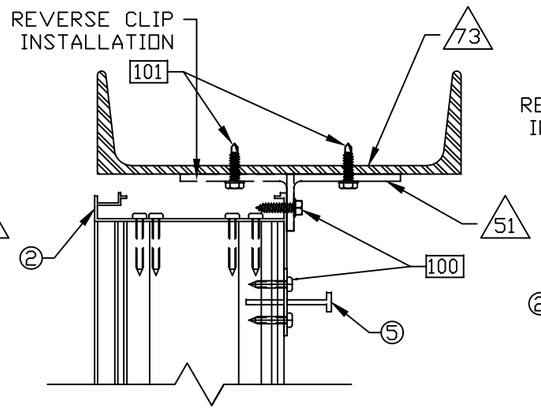


16 Ga MIN GALVANIZED STRUCTURAL STEEL STUD

Detail L/4

SCALE: NTS

SP-2

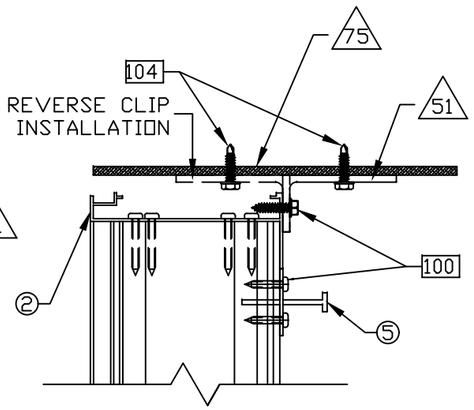


3/16" MINIMUM STRUCTURAL STEEL

Detail M/4

SCALE: NTS

SP-2

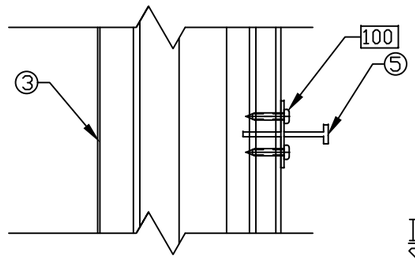


1/8" MINIMUM ALUMINUM PLATE

Detail N/4

SCALE: NTS

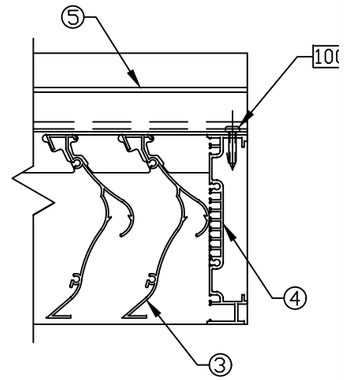
SP-2



Detail P/4

SCALE: NTS

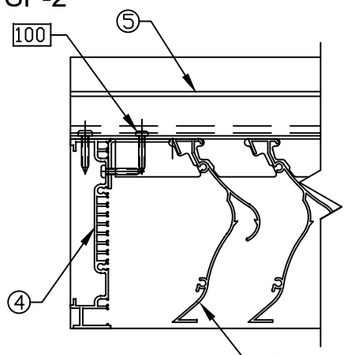
SP-2



Detail U/4

SCALE: NTS

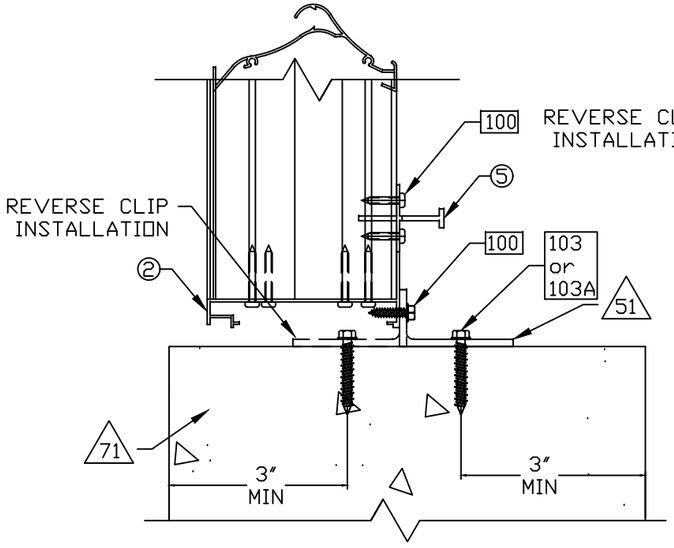
SP-2



Detail V/4

SCALE: NTS

SP-2

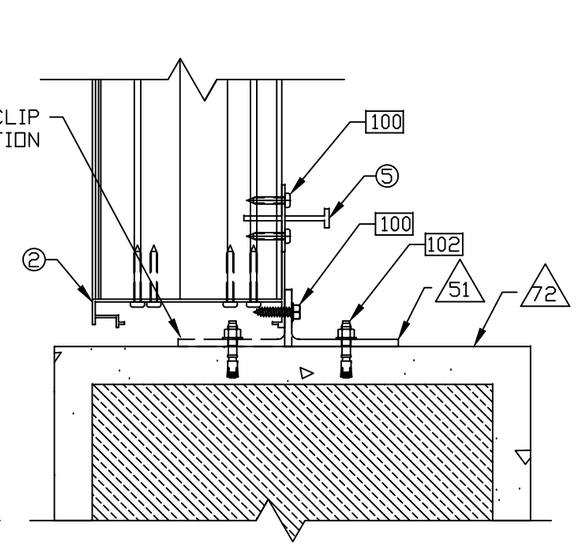


2000 LB MIN CONCRETE

Detail Q/4

SCALE: NTS

SP-2



CONCRETE FILLED CMU

Detail R/4

SCALE: NTS

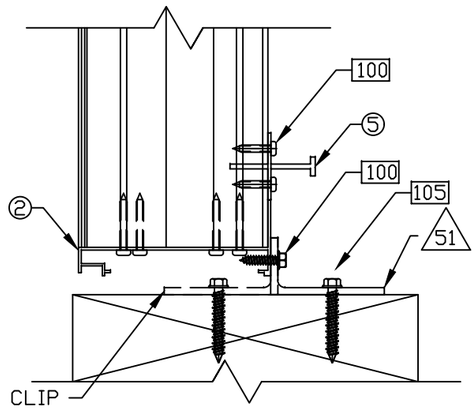
SP-2

THESE DETAILS PERTAIN TO THE VERTICAL BLADE ORIENTATION, DCV-5704

STATE OF TEXAS
GUSTAVE L. SCHMOLL
124202
LICENSED PROFESSIONAL ENGINEER

08/08/2019

Firm Number: F-2183



WOOD G=0.42 MIN.

Detail T/4

SCALE: NTS

SP-2

PROJECT: DC-5704 FOR TEXAS DEPT OF INSURANCE

TITLE: LAYOUT DRAWINGS

SCALE: 3"=1'-0"

DRW BY: R. GEIST

REVISION: 07-02-19

DATE: 10-02-08

SHEET: 4 OF 8

DRW NO : RD-1075

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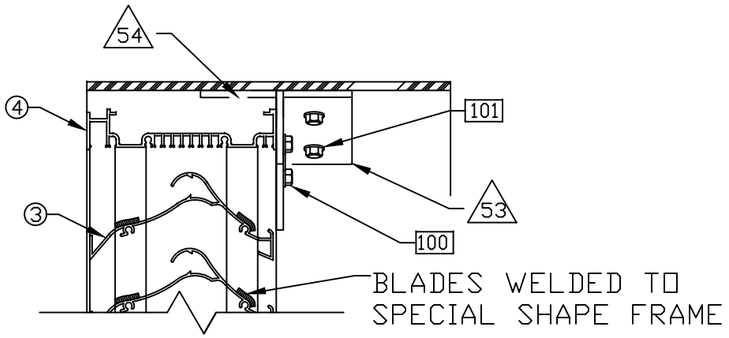
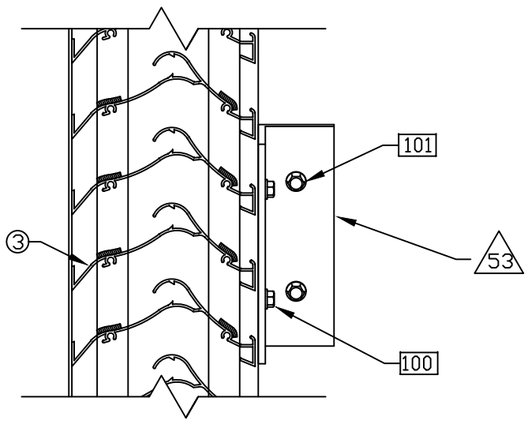
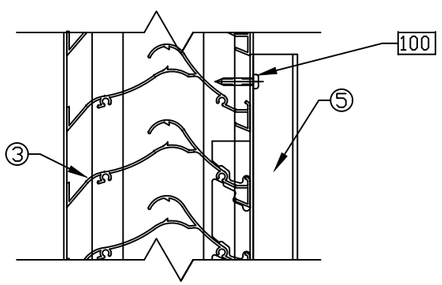


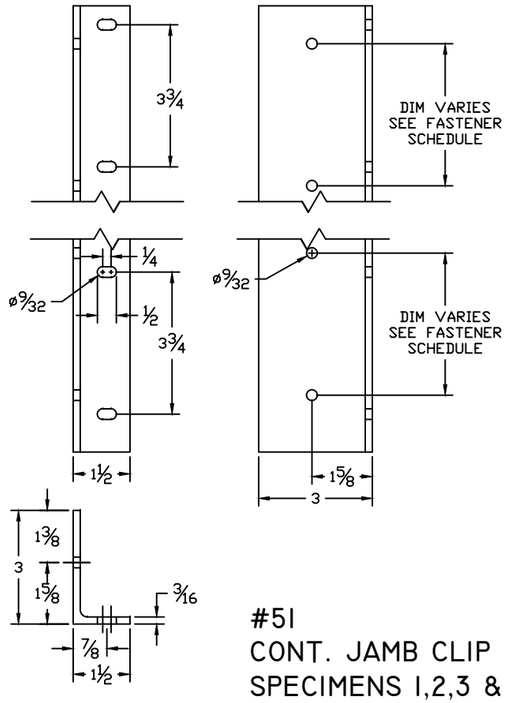
Detail W/5
SCALE: NTS
SP-3 & 4



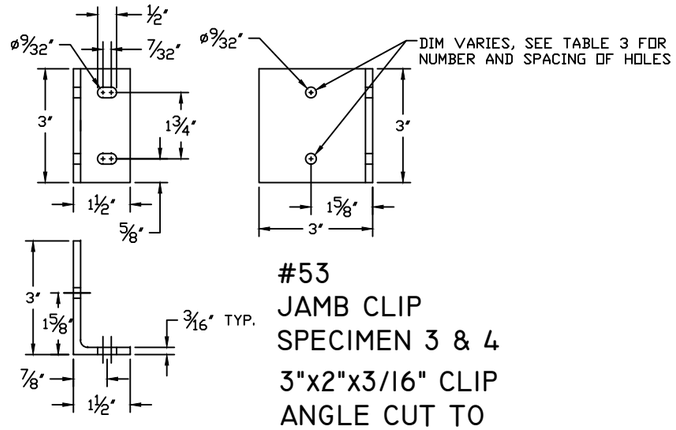
Detail X/5
SCALE: NTS
SP-3 & 4



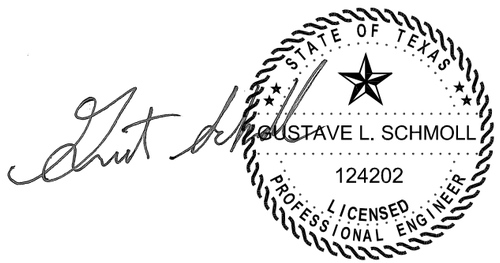
Detail Y/5
SCALE: NTS
SP-3 & 4



#51
CONT. JAMB CLIP
SPECIMENS 1,2,3 & 4



#53
JAMB CLIP
SPECIMEN 3 & 4
3"x2"x3/16" CLIP
ANGLE CUT TO
3"xl-1/2"X3" LG



08/08/2019
Firm Number: F-2183

PROJECT: DC-5704 FOR TEXAS DEPT OF INSURANCE	REVISION: 07-02-19
TITLE: LAYOUT DRAWINGS	DATE: 10-02-08
SCALE: 3"=1'-0"	SHEET: 5 OF 8
DRW BY: R. GEIST	DRW NO : RD-1075

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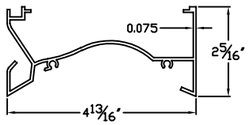
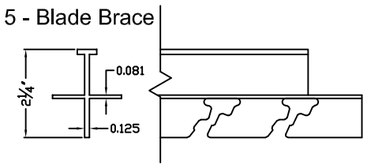
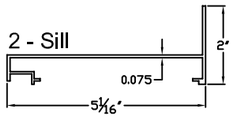
1 - Head



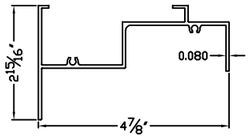
5 - Blade Brace



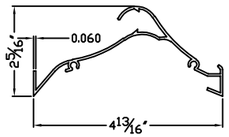
2 - Sill



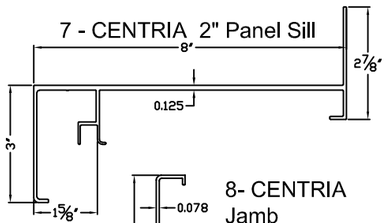
6 - CENTRIA Head



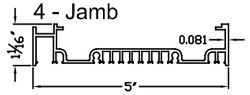
3 - Blade



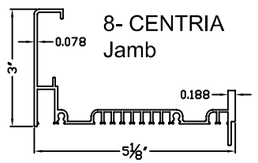
7 - CENTRIA 2" Panel Sill



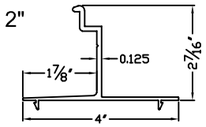
4 - Jamb



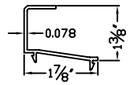
8- CENTRIA Jamb



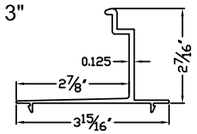
10 - CENTRIA 2" Panel Head Extension



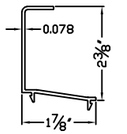
12 - CENTRIA 2" Panel Jamb Extension



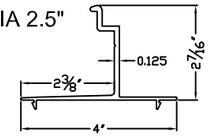
11 - CENTRIA 3" Panel Head Extension



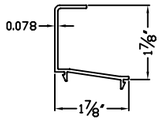
13 - CENTRIA 3" Panel Jamb Extension



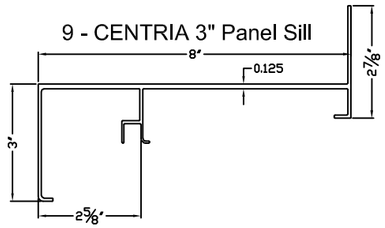
14 - CENTRIA 2.5" Panel Head Extension



15 - CENTRIA 2.5" Panel Jamb Extension



9 - CENTRIA 3" Panel Sill



16 - CENTRIA 2.5" Panel Sill

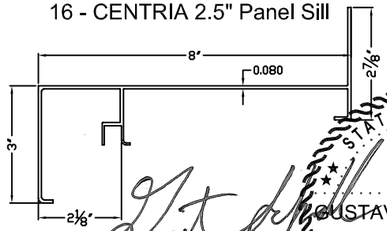


TABLE 1 - PARTS LIST		
ITEM	PART	DESCRIPTION
1	HEAD	6063-T6 ALUMINUM 0.075 THK
2	SILL	6063-T6 ALUMINUM 0.075 THK
3	BLADE	6063-T6 ALUMINUM 0.060 THK
4	JAMB	6063-T6 ALUMINUM 0.081 THK
5	BLADE BRACE	6063-T6 ALUMINUM 0.125 THK
6	CENTRIA HEAD	6063-T6 ALUMINUM 0.080 THK
7	CENTRIA 2" PANEL SILL	6063-T6 ALUMINUM 0.125 THK
8	CENTRIA JAMB	6063-T6 ALUMINUM 0.078 THK
9	CENTRIA 3" PANEL SILL	6063-T6 ALUMINUM 0.125 THK
10	CENTRIA 2" PANEL HEAD EXTENSION	6063-T6 ALUMINUM 0.125 THK AT BUILDING CONNECTION
11	CENTRIA 3" PANEL HEAD EXTENSION	6063-T6 ALUMINUM 0.125 THK AT BUILDING CONNECTION
12	CENTRIA 2" PANEL JAMB EXTENSION	6063-T6 ALUMINUM 0.078 THK
13	CENTRIA 3" PANEL JAMB EXTENSION	6063-T6 ALUMINUM 0.078 THK
14	CENTRIA 2.5" PANEL HEAD EXTENSION	6063-T6 ALUMINUM 0.125 THK AT BUILDING CONNECTION
15	CENTRIA 2.5" PANEL JAMB EXTENSION	6063-T6 ALUMINUM 0.078 THK
16	CENTRIA 2.5" PANEL SILL	6063-T6 ALUMINUM 0.080 THK
17	FRAME SPLICE COVER	3003 ALUMINUM 0.060 THK
51	JAMB ANGLE	1 1/2"x3"x3/16" CONT. ALUM ANGLE - 6061 T6
53	JAMB CLIP ANGLE	2"x3"x3/16"x3"LG ALUM. JAMB CLIP ANGLE - 6061 T6
54	BRACE CLIP ANGLE	2"x2"x3/16"x3"LG ALUM. JAMB CLIP ANGLE - 6061 T6
71	CONCRETE	2000# CONCRETE
72	CMU	GROUT FILLED CONCRETE MASONRY UNIT
73	STRUCTURAL STEEL	3/16" THK MIN.
74	STEEL STUD	16 GA MINIMUM
75	ALUMINUM STRUCTURE	1/8" MINIMUM
76	WOOD	G = 0.42 MINIMUM

Continious Clip Building Attachment Fastener Schedule (Table 2)

Part Num.	Fastener Description	Substrate	Max Spacing	Min. Edge Dist.	Min. embed.
100	1/4" SS or coated carbon steel self drilling or self tapping Sheet metal	0.081 Aluminum Mullion	3-3/4"	3/8"	NA
101	1/4" SS or coated carbon steel self drilling or self tapping Sheet metal Screw	.060 Cold Formed Steel	4-3/4"	1/2"	NA
101	1/4" coated carbon steel self drilling or self tapping sheet metal screw	3/16" Structural Steel	7-1/2"	1/2"	NA
102	1/4" Dia Hilti KB III	Grout Filled CMU	6"	2"	4"
103	Carbon steel or stainless steel 1/4" Tapcon or equiv.	2000 lb Concrete	6"	3"	1-3/4"
103A	Carbon steel or stainless steel 1/4" Tapcon Plus	2000 lb Cracked Concrete	6"	2-1/2"	1-1/2"
104	1/4 SS or coated carbon steel self drilling or self tapping screws	Aluminum (1/8" Min)	4"	1/2"	NA
105	1/4" SS or plated carbon steel wood screw	Wood	3"	2-1/2"	2-1/2"

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LICENSED
PROFESSIONAL ENGINEER

08/08/2019

Firm Number F-2334

Special Shape Louver Fastener Schedule - Clips 1-1/2" x 3" x 3" long (Table 3)

Part Num.	Fastener Description	Substrate	Num. Screws	Screw Spacing	Min. Edge Dist.	Min. embed.	Clip Spacing
100	1/4" SS or coated carbon steel self drilling or self tapping sheet metal screw	0.081 Aluminum Mullion	2	1 3/4"	NA	3/8"	NA
101	1/4" SS or coated carbon steel self Drilling or self tapping sheet metal Screw	.060 Cold Formed Steel	2	1 3/4"	NA	1/2"	9"
101	1/4" coated carbon steel self drilling or self tapping sheet metal screw	3/16" Structural Steel	1	NA	NA	1/2"	9"
102	1/4" Dia Hilti KB III	Grout Filled CMU	1	NA	2"	4"	9"
103	Carbon steel or 300 series stainless steel 1/4" Tapcon plus or equiv.	2000 lb Concrete	1	NA	3"	1-3/4"	6"
104	1/4" SS or coated carbon steel self drilling or self tapping screws	Aluminum (1/8" Min)	2	1 3/4"	1/2"	NA	6
105	1/4" SS or plated carbon steel wood screw	Wood	2	1 3/4"	2-1/2"	2-1/2"	6"

PROJECT: DC-5704 FOR TEXAS DEPT OF INSURANCE
TITLE: LAYOUT DRAWINGS
SCALE: HALF
DRW BY: R. GEIST
REVISION: 07-02-19
DATE: 10-02-08
SHEET: 6 OF 8
DRW NO : RD-1075

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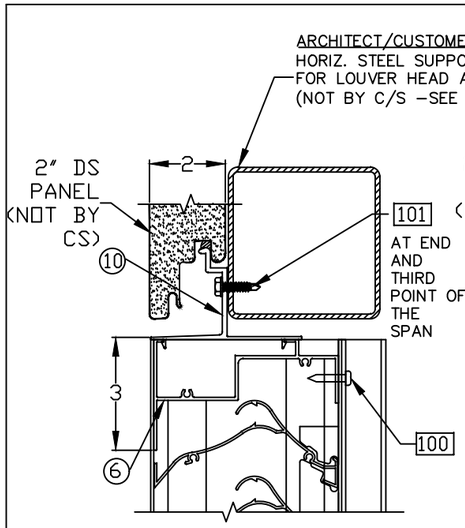
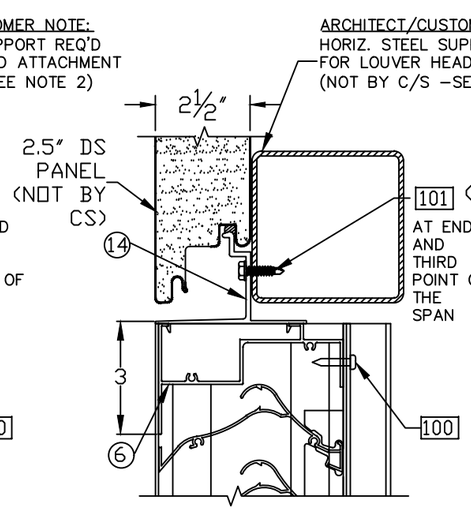


HEAD AND 2" PANEL INTERFACE

Detail H1/7

SCALE: NTS

SP-1

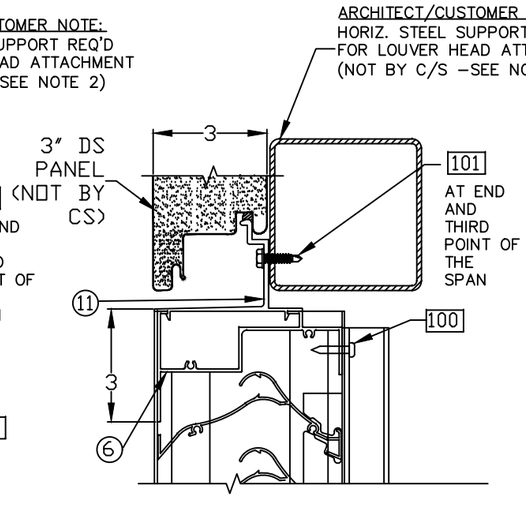


HEAD AND 2.5" PANEL INTERFACE

Detail H2/7

SCALE: NTS

SP-1

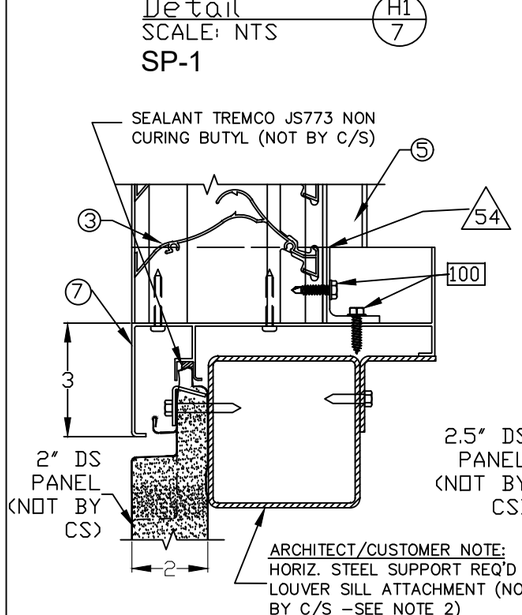


HEAD AND 3" PANEL INTERFACE

Detail H3/7

SCALE: NTS

SP-1

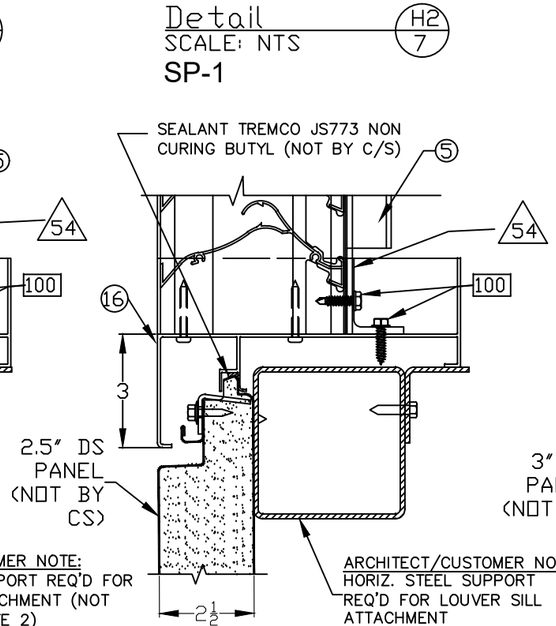


SILL AND 2" PANEL INTERFACE

Detail J1/7

SCALE: NTS

SP-1

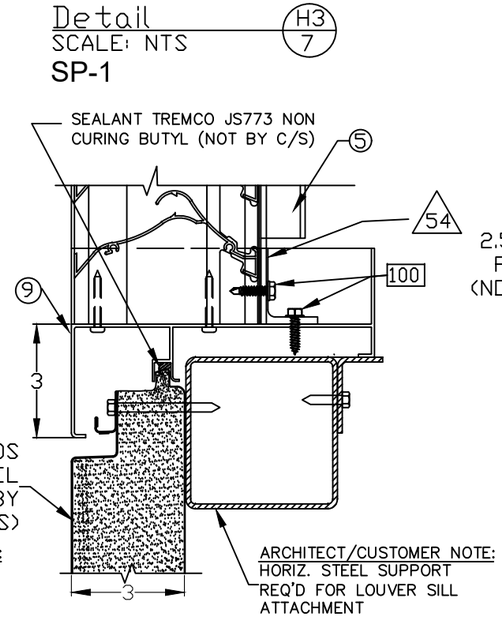


SILL AND 2.5" PANEL INTERFACE

Detail J2/7

SCALE: NTS

SP-1

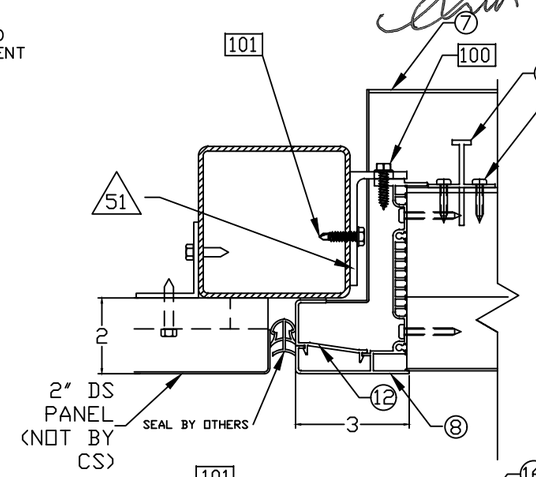


SILL AND 3" PANEL INTERFACE

Detail J3/7

SCALE: NTS

SP-1

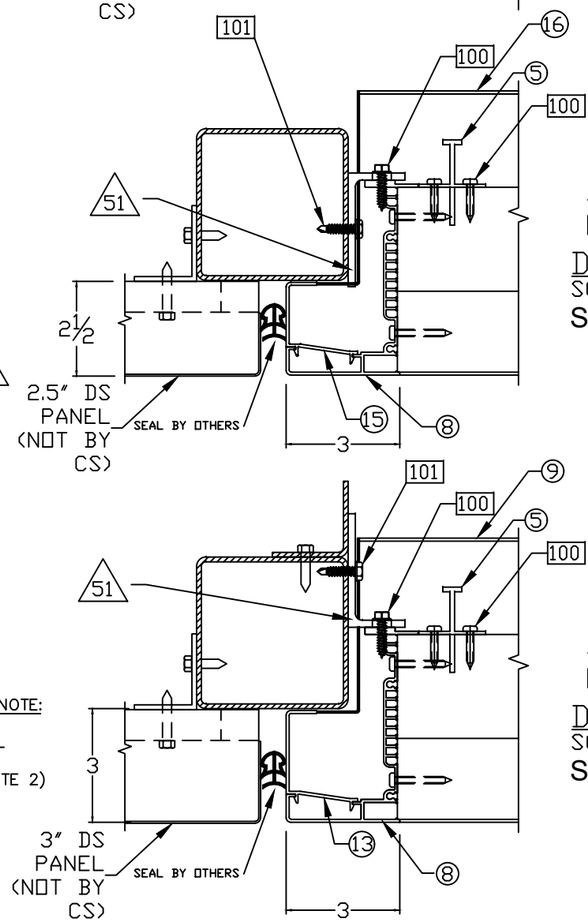


JAMB AND 2" PANEL INTERFACE

Detail C1/7

SCALE: NTS

SP-1



JAMB AND 2.5" PANEL INTERFACE

Detail C2/7

SCALE: NTS

SP-1

JAMB AND 3" PANEL INTERFACE

Detail C3/7

SCALE: NTS

SP-1

Note 1 – Alternate frame components for DCH 5704 louvers to allow louver integration with CENTRIA horizontal panels in the Centria Formawall Dimension and Graphix systems. The details on page 7 apply to Specimen 1 only

Note 2 – Structural Supports may be 3/16" structural steel or Minimum 16 gauge galvanized cold formed steel

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STATE OF TEXAS

08/08/2019

Firm Number: F-2183

PROJECT: DC-5704 FOR TEXAS DEPT OF INSURANCE
REVISION: 07-02-19
TITLE: LAYOUT DRAWINGS
DATE: 10-02-08
SCALE: 3"=1'-0"
SHEET: 7 OF 8
DRW BY: R. GEIST
DRW NO : RD-1075

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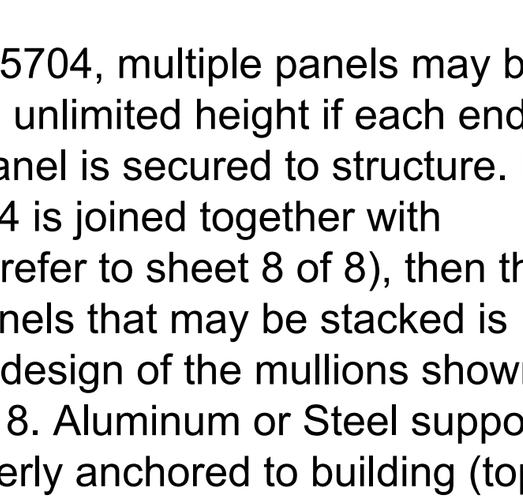
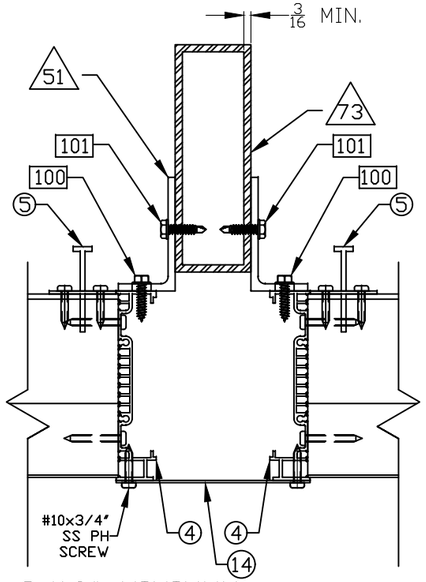
VERTICAL JOINT DETAILS FOR DCH-5704

For the DCH-5704, multiple panels may be stacked to an unlimited height if each end of the 144" panel is secured to structure. If the DCH-5704 is joined together with vertical joint (refer to sheet 8 of 8), then the number of panels that may be stacked is limited to the design of the mullions shown on sheet 8 of 8. Aluminum or Steel support must be properly anchored to building (top and bottom), and designed by Others.



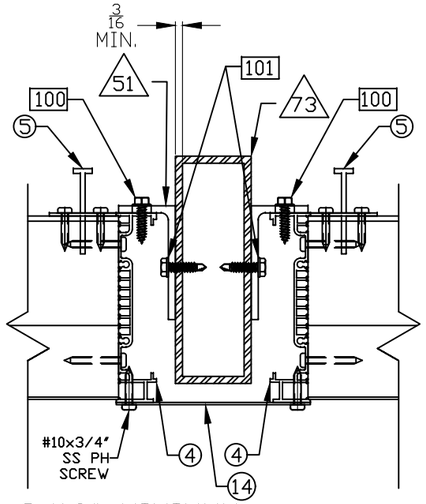
08/08/2019

Firm Number: F-2183



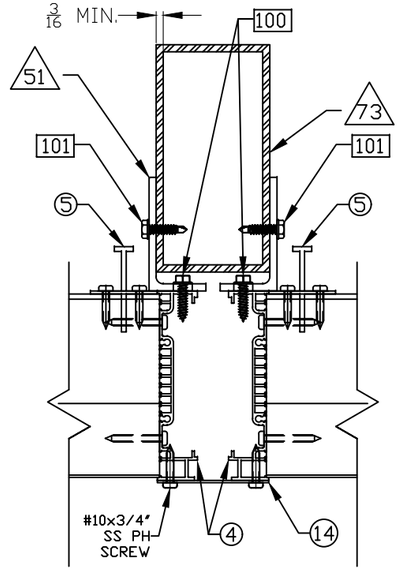
3/16" MINIMUM STRUCTURAL STEEL MULLION 73

SP-1



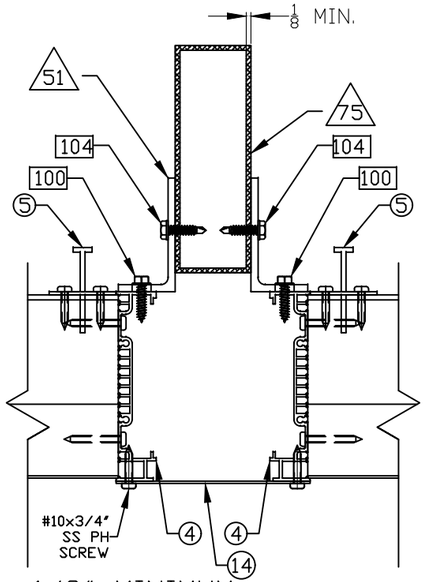
3/16" MINIMUM STRUCTURAL STEEL MULLION 73

SP-1



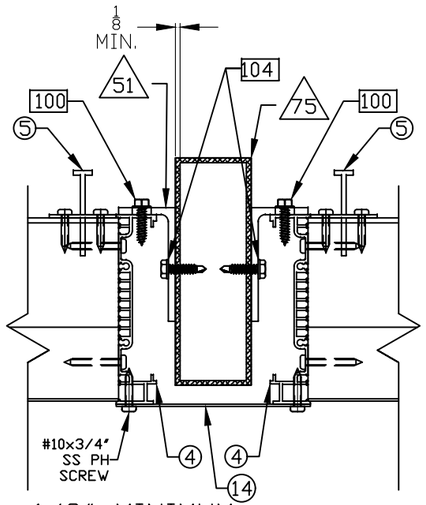
3/16" MINIMUM STRUCTURAL STEEL MULLION 73

SP-1



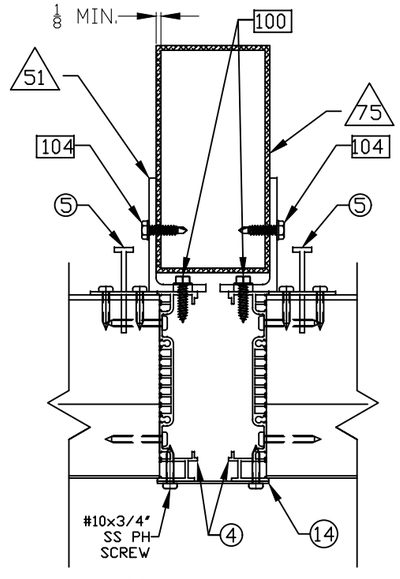
1/8" MINIMUM ALUMINUM SUPPORT MULLION 75

SP-1



1/8" MINIMUM ALUMINUM SUPPORT MULLION 75

SP-1



1/8" MINIMUM ALUMINUM SUPPORT MULLION 75

SP-1

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